

Annual Standards Report

U.S. Nuclear Regulatory Commission Implementation of P.L. 104-113 and OMB Circular A-119 October 1, 1997 - September 30, 1998

The NRC Strategic Plan for Fiscal Year 1997 - Fiscal Year 2002 establishes a framework that will guide future decision-making and will help the NRC continue to meet its responsibility for protecting public health and safety, promoting the common defense and security, and protecting the environment. The plan includes general goals consistent with the NRC's mission in specific strategic arenas that include nuclear reactor safety and nuclear materials safety. In these arenas, one strategy is to increase the involvement of licensees and others in the NRC regulatory process. Consistent with the provisions of Public Law 104-113, "National Technology Transfer and Advancement Act of 1995," enacted March 7, 1996, NRC will encourage industry to develop codes, standards, and guides that can be endorsed by the NRC and carried out by the industry. Agency-wide procedures are being developed to further promote the efficiency and effectiveness of the NRC process for implementing Public Law 104-113 and the supporting procedures in OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Standards and in Conformity Activities," issued February 19, 1998.

During the period for this annual report, the NRC staff conducted two stakeholder meetings to identify issues and develop options for improving its participation in the development and use of consensus standards. The first meeting, held in July 1998, was with NRC staff (internal stakeholders) from various NRC offices to discuss issues and options related primarily to NRC participation on standards committees. Discussions focused on identifying options for improving the effectiveness and efficiency of NRC staff participation in developing consensus standards. The second meeting, held in Chicago in September 1998, was with external stakeholders to discuss their concerns regarding NRC staff participation in the development and use of consensus standards. This meeting included representatives from individual utilities (reactor licensees), the Nuclear Energy Institute (NEI), standards developing organizations (SDOs) such as the American Society of Mechanical Engineers (ASME), nuclear steam supply system (NSSS) vendors, the Department of Energy, State governments, and the public. A transcript of this meeting was made available at the NRC web site shortly after the meeting. Information gained from this meeting, and other sources, will be used to formulate a program to improve NRC participation in the development and use of consensus standards.

The following is the NRC response to the reporting provisions of OMB Circular A-119.

- 1) The number of voluntary standards bodies in which there is agency participation, as well as the number of agency employees participating

There are 145 NRC staff members who participate on 16 standards developing organizations (SDOs). NRC staff participate on a total of 254 standards writing, consensus, and board level committees.

- 2) The number of voluntary consensus standards the agency has used since October 1, 1997, based on the procedures set forth in Sections 11 and 12 of the Circular

None. Procedures are in place to ensure that proposed and final rulemakings request information on the use of government-unique standards in accordance with the Circular.

The NRC endorsed 27 standards in regulatory guides, which provide one method acceptable to the NRC staff for meeting NRC regulations, and 28 standards in NUREG reports, which contain consolidated guidance for material licensees. These standards and the means of endorsement are identified in the table below.

- 3) Identification of voluntary consensus standards that have been substituted for government-unique standards as a result of an agency review under section 15b(7) of the Circular

No voluntary consensus standards were substituted for government-unique standards.

- 4) An evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes

The NRC believes that OMB Circular A-119 has been effective in providing a basis for uniform implementation of P.L. 104-113 by Federal agencies, and that coordination by the Interagency Committee on Standards Policy has been equally effective. We do recommend, however, that additional guidance be provided regarding whether a report need be provided to OMB if an agency places limitations or modifications on a voluntary consensus standard that it uses in a regulation. Depending on the guidelines, this could appreciably increase the number of instances in which a report would be required to be submitted to OMB.

- 5) As required by P.L. 104-113, identification of all instances when the agency used government-unique standards in lieu of voluntary consensus standards (for each instance include agency rationale for such use, as well as the specific government-unique standard used)

No government-unique standards were used by NRC in lieu of voluntary consensus standards.

**STANDARDS ENDORSED BY NRC
OCTOBER 1, 1997 - SEPTEMBER 30, 1998**

SDO ¹	Standard	Date	Title	Method of Endorsement ²
ANS	3.2	1994	Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants	R.G. 1.176
	3.4	1996	Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants	R.G.1.134
	8.1	1988	Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors	R.G. 3.71
	8.3	1997	Criticality Accident Alarm System	
	8.5	1996	Use of Borosilicate-Glass Raschig Rings as a Neutron Absorber in Solutions of Fissile Material	
	8.6	1995	Safety in Conducting Subcritical Neutron-Multiplication Measurements In Situ	
	8.7	1987	Guide for Nuclear Criticality Safety in the Storage of Fissile Materials	
	8.9	1995	Nuclear Criticality Safety Criteria for Steel-Pipe Intersections Containing Aqueous Solutions of Fissile Materials	
	8.10	1988	Criteria for Nuclear Criticality Safety Controls in Operations with Shielding and Confinement	
	8.12	1993	Nuclear Criticality Control and Safety of Plutonium-Uranium Fuel Mixtures Outside Reactors	

SDO ¹	Standard	Date	Title	Method of Endorsement ²
	8.15	1995	Nuclear Criticality Control of Special Actinide Elements	
ANS	8.17	1997	Criticality Safety Criteria for the Handling, Storage, and Transportation of LWR Fuel Outside Reactors	R.G. 3.71
	8.19	1996	Administrative Practices for Nuclear Criticality Safety	
	8.20	1991	Nuclear Criticality Safety Training	
	8.21	1995	Use of Fixed Neutron Absorbers in Nuclear Facilities Outside Reactors	
	8.22	1997	Nuclear Criticality Safety Based on Limiting and Controlling Moderators	
	8.23	1997	Nuclear Criticality Accident Emergency Planning and Response	
HPS	ANSI N13.1	1993	Sampling Airborne Radioactive Materials in Nuclear Facilities	NUREG-1556
	ANSI N13.4	1983	Specification of Portable X- or Gamma Radiation Survey Instruments	
	ANSI N13.5	1989	Performance and Specifications for Direct Reading and Indirect Reading Pocket Dosimeters for X- and Gamma Radiation	
	ANSI N13.6	1989	Practice for Occupational Radiation Exposure Records Systems	
INMM	ANSI N14.5	1997	Leakage Tests on Packages for Shipment of Radioactive Materials	
IEEE	ANSI N42.12	1995	Calibration and Usage of Sodium Iodide Detector Systems	
	ANSI N42.13	1985	Calibration and Usage of Dose Calibrator Ionization Chambers for the Assay of Radionuclides	
	ANSI N42.15	1997	Performance Verification of Liquid Scintillation Counting Systems	

SDO ¹	Standard	Date	Title	Method of Endorsement ²
	ANSI N42.17A	1989	Performance Specifications for Health Physics Instrumentation—Portable Instrumentation for Use in Normal Environmental Conditions	
IEEE	ANSI N42.18	1991	Specification and Performance of On-site Instrumentation for Continuously Monitoring Radioactive Effluents	NUREG-1556
HPS	ANSI N43.2	1989	Radiation Safety for X-Ray Diffraction and Fluorescence Analysis Equipment	
	ANSI N43.4	1989	Classification of Radioactive Self-Luminous Light Sources	
	ANSI N43.9	1991	Specifications for Design and Testing of Apparatus for Gamma Radiography	
	ANSI N43.10	1984	Safe Design and Use of Panoramic, Wet Source Storage Gamma Irradiators (Category IV)	
ANSI	ANSI N44.1	1984	Integrity and Test Specifications for Selected Brachytherapy Sources	
	ANSI N44.2	1984	For Leak-Testing Radioactive Brachtherapy Sources	
ASME	ANSI N45.2.2	1972	Packaging, Shipping, Receiving, Storage and Handling of Items for Nuclear Power Plants (During the Construction Phase)	R.G. 1.176
	ANSI N45.2.11	1974	Quality Assurance Requirements for the Design of Nuclear Power Plants	
	ANSI N45.2.12	1977	Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants	
	ANSI N45.2.13	1976	Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants	

SDO ¹	Standard	Date	Title	Method of Endorsement ²
IEEE	ANSI N322	1997	Inspection and Test Specifications for Direct and Indirect Reading Quartz Fiber Pocket Dosimeters	NUREG-1556
	ANSI N323	1983	Radiation Protection Instrumentation Test and Calibration	
IEEE	ANSI N323A	1997	Radiation Protection Instrumentation Test and Calibration, Portable Survey Instruments	NUREG-1556;
ANSI	ANSI N432	1980	Radiological Safety for the Design and Construction of Apparatus for Gamma Radiography	
	ANSI N433.1	1977	Safe Design and Use of Self-Contained Dry Source Storage Gamma Irradiators (Category I)	
IEEE	ANSI N449.1	1984	Procedures for Periodic Inspection of Cobalt-60 and Cesium-137 Teletherapy Equipment	
ANSI	ANSI N537	1976	Radiological Safety Standard for the Design of Radiographic and Fluoroscopic Industrial X-Ray Equipment	
	ANSI N538	1979	Classification of Industrial Ionizing Radiation Gauging Devices	
	ANSI N542	1977	Sealed Radiation Sources, Classification	
ASME	BPVC Section XI	1989	Rules for Inservice Inspection of Nuclear Power Plant Components	R.G. 1.175
	OM Code	1995	Operation and Maintenance of Nuclear Power Plants	
	Code Case N-560	1996	Alternative Examination Requirements for Class 1, Category B-J Piping Welds (Section XI)	R.G. 1.178
	Code Case N-577	1997	Risk-Informed Requirements for Class 1, 2, and 3 Piping, Method A (Section XI)	

SDO ¹	Standard	Date	Title	Method of Endorsement ²
	Code Case N-578	1997	Risk-Informed Requirements for Class 1, 2, and 3 Piping, Method B (Section XI)	
IEEE	450	1987	Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations	R.G. 5.44
ISO	3999	1977	Apparatus for Gamma Radiography-- Specification	NUREG-1556
	7205	1986	Radionuclide Gauges -- Gauges Designed for Permanent Installation	
	2919	1980	Sealed Radiation Sources, Classification	

1. ANSI: American National Standards Institute
 ASME: American Society of Mechanical Engineers
 HPS: Health Physics Society
 IEEE: Institute of Electrical and Electronics Engineers
 INMM: Institute of Nuclear Materials Management
 ISO: International Standards Organization

2. R.G. 1.134: Regulatory Guide 1.134 (Revision 3) -- Medical Evaluation of Licensed Personnel at Nuclear Power Plants (March 1998)

 R.G. 1.175: Regulatory Guide 1.175 -- An Approach for Plant-Specific, Risk-Informed Decision-Making: Inservice Testing (August 1998)

 R.G. 1.176: Regulatory Guide 1.176 -- An Approach for Plant-Specific, Risk-Informed Decision-Making: Graded Quality Assurance (August 1998)

 R.G. 1.178: Regulatory Guide 1.178 -- An Approach for Plant-Specific, Risk-Informed Decision-Making: Inservice Inspection of Piping (September 1998)

 R.G. 3.71: Regulatory Guide 3.71 -- Nuclear Criticality Safety Standards for Fuels and Materials Facilities (August 1998)

 R.G. 5.44: Regulatory Guide 5.44 (Revision 3) -- Perimeter Intrusion Alarm Systems (October 1997)

 NUREG-1556: Consolidated Guidance About Materials Licenses (Program specific guidance in nine volumes)